

TB  
2/21/97**- VOLUME 1 -**

# **SITE INVESTIGATION**

## **JAMES MATTEO & SONS, INC. SITE WEST DEPTFORD TWP., GLOUCESTER COUNTY**



0.51 0 0.51 1.02 Miles



**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE  
ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE SECTION**

# MATTEO SAMPLE MAP

## AUGUST 7, 1996



### Legend

- soil background sample
- sediment + surface water sample

**JAMES MATTEO AND SONS SITE  
WEST DEPTFORD TOWNSHIP, GLOUCESTER COUNTY  
EPA ID No.: NJD011770013**

**TABLE OF CONTENTS**

**NARRATIVE  
MAPS**

1. UNITED STATES GEOLOGICAL SURVEY (USGS) TOPOGRAPHIC MAP -  
WOODBURY QUADRANGLE (1986)
2. SITE AND SAMPLING MAP (1996)
3. TAX MAP (date unknown)
4. GLOUCESTER COUNTY ROAD MAP (1985)
5. NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) WATER  
WITHDRAWAL POINTS MAP (1996)
6. UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL WETLANDS  
INVENTORY MAP - WOODBURY QUADRANGLE (1977)
7. NATIONAL FLOOD INSURANCE PROGRAM MAP, WEST DEPTFORD TOWNSHIP  
(1982)
8. UNITED STATES DEPARTMENT OF AGRICULTURE AERIAL PHOTOGRAPH; 1959
9. PSE&G DIAGRAM OF SITE SHOWING PIPELINES; 1991

**ATTACHMENTS**

- A. NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP);  
AIR ENFORCEMENT FILES; SEPTEMBER 29, 1968
- B. NJDEP LANDFILL INSPECTION; OCTOBER 5, 1972
- C. JAMES MATTEO & SONS, INC (MATTEO) APPLICATION FOR CERTIFICATION  
AS A SOLID WASTE REFUSE OPERATION; OCTOBER 30, 1972
- D. WEST DEPTFORD TOWNSHIP LETTER APPROVING BATTERY LANDFILLING;  
NOVEMBER 2, 1972
- E. MATTEO LETTER WITHDRAWING APPLICATION; DECEMBER 28, 1972
- F. NJDEP INSPECTION OF MATTEO LANDFILL REVEALS ONGOING  
LANDFILLING; FEBRUARY 5, 1973
- G. NJDEP INSPECTION OF MATTEO REVEALS LANDFILLING HALTED;

CITIZEN COMPLAINT LETTER; MARCH 25, 1975

- . NJDEP MEMO REGARDING VERBAL ORDER TO REMOVE BATTERY CASINGS FROM HESSIAN RUN; APRIL 1, 1975
- . NJDEP INSPECTION REVEALS MATTEO REMOVING CASINGS FROM WATER; APRIL 8, 1975
- K. CITIZEN COMPLAINT ABOUT MATTEO LANDFILL; SEPTEMBER 9, 1978
- L. NJDEP INSPECTION DOES NOT REVEAL DISPOSAL OF CHEMICALS OR BATTERIES AT MATTEO; OCTOBER 17, 1978
- M. NJDEP INSPECTION REVEALS ABANDONED WASTE AT MATTEO; FEBRUARY 1, 1983
- N. GLOUCESTER COUNTY HEALTH DEPARTMENT NOTES REGARDING WASTE AT MATTEO; MARCH 25, 1983
- O. NJDEP INCIDENT RECORD REGARDING DRUMMED WASTE AT MATTEO; MARCH 29, 1983
- P. NJDEP INSPECTION REVEALS SEPARATE MATTEO BUSINESS INVOLVED IN TRUCKING WASTES TO MATTEO SITE; APRIL 28, 1983
- Q. NJDEP ADMINISTRATIVE ORDER TO MATTEO; JANUARY 12, 1984
- R. MATTEO PAYMENT OF FINE AND REQUEST FOR TECHNICAL ASSISTANCE; JANUARY 12, 1984
- S. NJDEP INCIDENT REPORT OF FIRE AT MATTEO; MAY 21, 1984
- T. NJDEP INSPECTION REVEALING EXTENT OF WASTE AT MATTEO; MAY 22, 1984
- U. NJDEP SAMPLING EPISODE AT MATTEO; AUGUST 28, 1984
- V. MATTEO LETTER REGARDING WASTE SAMPLING PER ADMINISTRATIVE ORDER; SEPTEMBER 6, 1984
- W. NJDEP FINDS THAT MATTEO WASTE IS NON-HAZARDOUS; DECEMBER 18, 1984
- X. NJDEP SAMPLING REVEALS WASTES AT MATTEO ARE HAZARDOUS FOR LEAD; JANUARY 18, 1985
- Y. NJDEP INVESTIGATION REGARDING NEARBY MATTEO TRUCKING WASTE INCIDENT; APRIL 5, 1988
- Z. NJDEP INVESTIGATION AT MATTEO REGARDING CITIZEN COMPLAINT; JANUARY 15, 1991

- AA. NJDEP INVESTIGATION AT MATTEO DEFINING AREAS OF CONCERN;  
MARCH 11, 1991
- BB. NJDEP REPORT REGARDING SAMPLING BY MATTEO; MAY 21, 1991
- CC. NJDEP REPORT STATES THAT WASTE SAMPLED BY MATTEO IS HAZARDOUS;  
JULY 16, 1991
- DD. NJDEP REPORT REGARDING AGREEMENT FOR FURTHER SAMPLING;  
SEPTEMBER 26, 1991
- EE. MATTEO PLAN FOR SAMPLING; NOVEMBER 19, 1991
- FF. NJDEP REPORT REGARDING SAMPLING AT MATTEO; JANUARY 14, 1992
- GG. NJDEP REPORT REGARDING SAMPLING AT MATTEO; JANUARY 15, 1992
- HH. NJDEP MEMO REGARDING SAMPLING RESULTS AT MATTEO; MAY 28, 1992
- II. MATTEO LETTER REGARDING ONE OF ITS TRADE NAMES; JUNE 22, 1992
- JJ. NJDEP GEOLOGIST RECOMMENDATIONS FOR GROUNDWATER SAMPLING;  
NOVEMBER 24, 1992
- KK. MATTEO LETTER REJECTING ADMINISTRATIVE CONSENT ORDER;  
MAY 17, 1993
- LL. NJDEP SPILL FUND DIRECTIVE TO MATTEO; JUNE 14, 1995
- MM. NJDEP SAMPLING RESULTS FOR POTABLE WELLS; MARCH 14, 1995
- NN. NJDEP SAMPLING PLAN; JANUARY 23, 1996
- OO. NJDEP MEMO REGARDING TAX LOTS; APRIL 29, 1996
- PP. NJDEP MEMO REGARDING TRAILER PARK; APRIL 29, 1996
- QQ. NJDEP MEMO REGARDING GEOLOGIC INFORMATION; MAY 20, 1996
- RR. NJDEP ASSEMBLAGE OF LOCAL WELL RECORDS; MAY 20, 1996
- SS. NJDEP MEMO REGARDING WATER USAGE; MAY 28, 1996
- TT. NJDEP MEMO REGARDING HAZARDOUS WASTE NUMBER; MAY 28, 1996
- UU. NJDEP SAMPLING EVENT AT MATTEO AND ANALYTICAL RESULTS;  
JUNE 6, 1996
- VV. NJDEP MEMO REGARDING HYDROGEOLOGY; JUNE 26, 1996

- WW. NJDEP MEMO REGARDING SOILS; JUNE 26, 1996
- XX. NJDEP MEMO REGARDING POPULATION; JUNE 26, 1996
- YY. NJDEP SURFACE WATER WITHDRAWAL POINTS DOCUMENT; 1992
- ZZ. NJDEP SAMPLING EVENT AT MATTEO AND ANALYTICAL RESULTS;  
AUGUST 7, 1996
- AAA. UNITED STATES DEPARTMENT OF THE INTERIOR, ATLANTIC COAST  
ECOLOGICAL INVENTORY; 1980
- BBB. NJDEP QUALITY ASSURANCE REVIEWS; 1996

# PRELIMINARY ASSESSMENT AND SITE INVESTIGATION REPORT

## PART I: GENERAL INFORMATION

Site Name: James Matteo and Sons, Inc  
Aka: Matteo Iron and Metal (Attachment II)  
Aka: Mateo Trucking Company (Attachments P, Y, TT)  
Address: 1708 U.S. Highway 130  
City: West Deptford State: New Jersey Zip Code: 08086  
County: Gloucester  
EPA ID No.: NJD011770013  
Block:128 Lot(s): 2  
Block:325 Lot(s): 2 (Attachment 00)  
Latitude: 39° 51' 20" Longitude:75° 10' 15"  
Acreage: 80 SIC Code: 4953

Current Owner & Operator: James Matteo & Sons, Inc.  
Mailing Address: 1708 US Route 130  
City: West Deptford State: New Jersey Zip Code: 08086  
Telephone No.: 609-845-0398

### Owner/Operator History:

NAME	OPERATOR/ OWNER	DATES	
		FROM	TO
Samuel/Bertha Wilkins Book 187/Page 533	OWNER	12/10/07	3/26/47
James & Rose Matteo Book 563/Page 459	OWNER	3/26/47	3/15/61
J. Matteo Sons, Inc. Book 1020, Page 414	OWNER/OPERATOR	3/15/61	PRESENT

Book and page references deeds found at the Gloucester County Registrar's Office

Surrounding Land Use (zoning, adjacent properties): The site is bounded by Hessian Run to the north, a trailer park for much of its southern boundary and Route 295 on the southeastern boundary.

Distance to Nearest Residence or School: Adjacent

Direction: South

Population Density (residents per square mile): The 1990 Census indicates that West Deptford Township has 1219 residents per square mile.

## PART II: SITE OPERATIONS

Discuss all current and past operations at the site. In addition, tabulate all areas of concern (AOC) and provide the waste source type for each AOC. Include the physical state of waste at each AOC as stored or disposed, and the volume of waste stored or disposed, or the volume or area of contaminated soil or water.

The James Matteo & Sons, Inc. (Matteo) site is comprised of an approximately 4.5 acre junk yard area and an approximately 6 acre landfill area. Currently, the junk yard accepts primarily non-automotive scrap, but it formerly accepted large numbers of automotive batteries. The unregistered landfill accepted industrial and domestic wastes, but a significant portion of the landfill capacity was devoted to automotive battery casings. These casings are predominantly located along the shores of Hessian Run.

The Matteo site first came to the attention of the New Jersey Department of Health during 1968 when an inspection revealed that Matteo had an incinerator which was not in operation. (Attachment A31)

On April 14, 1971, Matteo requested approval from the New Jersey Department of Environmental Protection (NJDEP) to burn copper wire in the noted incinerator. The request stated that in the course of business, Matteo accepted "scrap iron and metals and rags" and that air contaminants emitted by the incinerator were "unburned particles of oil, tar, grease, rubber and plastic". The application was approved on April 22, 1971. (Attachment A28,29)

On May 10, 1971, Matteo submitted a plan that described a "sweating fire box" wherein "lead battery terminals" were melted. On October 15, 1973, a NJDEP inspection of Matteo determined that the "lead sweating operation" was ongoing. (Attachment A23, 25)

On October 2, 1972, NJDEP inspected the Matteo "junkyard" and observed landfilling of crushed battery casings from automobiles in an area of wetlands adjacent to Hessian Run. (Attachment B)

On October 30, 1972, Matteo submitted an application for certification to operate a landfill at the above noted blocks and lots (the site). The application listed Augustine Matteo, Sr. as Vice President of Matteo and stated that his address was 1465 Crown Point Road, Verga, New Jersey. (Attachment C)

By letter dated December 28, 1972, Matteo withdrew its landfill certification application. The letter stated that Matteo intended to sell the crushed casings for use in road projects and other recycling uses. Nevertheless, on February 5, 1973, NJDEP observed that Matteo continued "reclaiming land" by landfilling crushed casings. The inspection report depicted the landfilled area as distinct and remote from the junkyard area of the site. On March 1,

1973, NJDEP noted that Matteo had stopped landfilling with the crushed casings which were accumulating in a large pile at the landfill, reportedly ready for recycling. (Attachments E, F, G)

An April 3, 1974 inspection by NJDEP revealed that Matteo continued to operate an incinerator for smelting of battery parts. The inspection report stated that waste products from the operation were "hailed to landfill". Also noted during the inspection was a change in the status of the wire burning incinerator from the approved use to the lead smelting use. Finally, the inspection revealed that Matteo planned to acquire a "mechanical breaker" so that lead could be reclaimed from batteries without a melting process. Acquisition of a bag house was also planned in order to control particulates from the breaking process. As a result of the April 3, 1974 inspection, NJDEP issued an Order to cease the lead smelting operation. (Attachment A14, 22)

By letter dated March 25, 1975, NJDEP received a citizen complaint regarding continued landfilling in the marshlands of Hessian Run creek. However, during an April 1, 1975 inspection, Matteo stated that it was recycling the crushed casings. At that time, NJDEP instructed Matteo to remove the casings from the waters of Hessian Run and to redeposit same in an upland position and apply soil as cover. On April 8, 1975, NJDEP observed Matteo complying with the instructions. (Attachments H, I, J)

On April 5, 1976, NJDEP reported that a fire had been burning at the Matteo landfill for approximately 3 days. Matteo had utilized a backhoe to remove smoldering objects from the ground and had doused same with river water. (Attachment A13)

By letter dated September 9, 1978, NJDEP again received a complaint about Matteo landfilling along Hessian Run. However, by memorandum dated October 17, 1978, NJDEP noted that an inspection did not reveal "disposal of chemicals or batteries." (Attachments K, L)

Another series of complaints during 1983 prompted NJDEP inspections of the woodlands surrounding mobile home parks adjacent to Matteo. The inspections revealed abandoned drums full of unknown wastes and large amounts of unknown waste material strewn on the surface of the ground. While companies known as NJ Zinc and Gulf & Western were mentioned as sources for the wastes, NJDEP did not obtain admissions from the companies or find written evidence of the origin of the wastes. (Attachments M, N, O)

An April 28, 1983 inspection report by NJDEP disclosed a statement by Jim Matteo which indicated that the landfill was not actually part of the junkyard operation since it was rented to other Matteo family members who owned a business known as Thorofare Trash and Trucking Company. Per Jim Matteo, Thorofare Trucking was operated from the Matteo site but was then moved to a location "visible from the junkyard" and "across Route 130". The same inspection report

states that Thorofare Trucking was responsible for transporting a white powdery waste to the landfill portion of the Matteo site. Finally, the inspection revealed that Matteo was incinerating wire and disposing of the ash on site at the landfill. (Attachment P)

Mateo Trucking Company has a USEPA hazardous waste identification number of NJD991304072 and the same address listed above for the Vice President of Matteo. The Vice President of Matteo, who shares the same address with Mateo Trucking Company, was reportedly involved in an incident involving 100 drums of a corrosive petroleum liquid which were abandoned at a warehouse proximate to the site. (Attachments Y, TT)

As a result of the April 28, 1983 inspection, NJDEP issued a January 12, 1984 Administrative Order to Matteo for solid waste violations and required Matteo to cease waste disposal at the site and to conduct waste classification analyses of wastes discovered by NJDEP at the site. (Attachment Q)

On May 21, 1984, NJDEP was notified that a fire was ongoing at the site. A May 22, 1984 inspection by NJDEP revealed that wastes were burning, that there were waste drums in the woods and thousands of battery casings along the bank of Hessian Run. (Attachments S, T)

On June 20, 1984, Matteo sampled waste from the site. By letter dated December 18, 1984, NJDEP stated that the sampled wastes were non-hazardous. (Attachments V, W)

On August 28, 1984, NJDEP conducted sampling at the site. The sampling revealed that wastes associated with the crushed casings exhibited the hazardous waste characteristic for lead and that other wastes contained high levels of volatile organic compounds. (Attachments U, X)

NJDEP inspected Matteo on September 29, 1986 and discovered that Matteo had not used the incinerator since 1985. Another inspection during 1987 revealed continued idleness of the incinerator. By 1988, Matteo had informed NJDEP that they did not intend to renew the certification for the incinerator. (Attachments A2, A7)

During 1991, NJDEP again received a citizen complaint regarding conditions at the site. NJDEP's inspections prompted two sampling efforts by Matteo. The first sampling event on May 21, 1991 revealed that hazardous wastes were contained in a small number of buried crushed drums and that a widespread yellow, powder-like waste had a high petroleum hydrocarbon content. The second sampling event conducted during January of 1992 revealed that the site exhibited widespread contamination with per cent levels of petroleum and lead. The lead was associated with the crushed casings. (Attachments Z, AA, BB, CC, DD, EE, FF, GG, HH)

On May 17, 1993, Matteo rejected NJDEP's offer to enter into an Administrative Consent Order (ACO). The ACO required Matteo to conduct a remedial investigation at the site. (Attachment KK)

On June 14, 1995, NJDEP issued a Spill Compensation and Control Act Directive to Matteo which directed Matteo to pay NJDEP to conduct a remedial investigation at the site. Matteo's refusal to pay for the investigation resulted in NJDEP authorizing public funds to be allocated for sampling. (Attachment LL)

On August 31, 1994, NJDEP collected samples from two potable wells at the site. Analytical results revealed that water from one well was contaminated with 57 parts per billion of lead, which exceeds the New Jersey Safe Drinking Water Act standard. (Attachment MM)

By document dated January 23, 1996, NJDEP produced a plan to more fully define the extent of wastes landfilled at the site.

During June 1996, NJDEP conducted soil and ground water sampling at the junkyard and landfill sections of the site. In general, the results demonstrated that elevated levels of cadmium and lead are found in the soils across the junkyard while polychlorinated biphenyls (PCBs) are associated with a limited area of petroleum staining. The results also indicated that the cadmium and lead exceed NJDEP ground water standards on a site-wide basis. A more detailed recitation of the sampling results can be found in sections IV and V below.

#### AOC SUMMARY TABLE

AOC Name	HRS Source Type	Physical State	Waste Quantity
Landfill	Landfill	Liquid and Solid	6 acres
Scrap Yard/Incinerator	Contaminated Soil	Solid	4.5 acres
Hessian Run Creek	Contaminated Sediment	Lead deposited to sediment	.5 mile

#### PART III: PERMITS

##### A. NJPDES

Number	Date Issued	Expiration Date	Formation or Water Body Discharged To
A NJPDES permit was not issued for this site.			

**B. New Jersey Air Pollution Control Certificates**  
Plant ID No.: 55047  
No. of Certificates: 004641  
Equipment Permitted: Incinerator

**C. BUST Registration**

There are no registered tanks listed in the NJDEP records.

**D. Other Permits**

Issuing Agency	Permit Type	Permit No.	Date Issued	Expiration Date
None known				

**PART IV: SOIL EXPOSURE**

**Describe soil type. Include soil series, composition of the soil and permeability of the soil.**

The Soil Survey of Gloucester County reveals that the predominant soil at the site is Downer series which is described as a well-drained, sandy loam underlain by sandy or gravelly strata. This general description was generally supported by NJDEP field observations which tended to characterize the soils as uncohesive sandy soils in the first 4 feet. (Attachments UU, WW)

**Discuss contaminants identified in the soil. Include sampling date, sampling agency or company, sample locations, depth and contaminant level. Identify samples collected from a residential property, school, daycare center, workplace, terrestrial sensitive environment or resource. State whether Level 1 or Level 2 contamination is present.**

The following tables summarize data points which exceed an applicable NJDEP Soil Cleanup Criteria (SCC) for residential areas. All data are expressed in parts per million and all depths are in feet. All Sampling locations can be found on Map 2. The abbreviation TPH stands for total petroleum hydrocarbons.

January 1991 Test Pit Results - Landfill Area

Location	Depth	Parameter	Result	NJDEP SEC
TP-1	6	TPH	11,880	10,000
TP-2	4	TPH	3,920	10,000
TP-3	3	TPH	44,600	10,000
TP-4	4	lead	2,700	400
	4	TPH	1,530	10,000
TP-5	4	lead	13,300	400
	4	TPH	4,160	10,000
TP-6	4	lead	1,100	400
	4	TPH	4,590	10,000
TP-7	4	lead	39,200	400
	4	TPH	4,090	10,000

(Attachments FF, GG, HH, Map 2)

June 1996 Surface Soil Sampling Results for Metals - Junk Yard Area

Location	Parameter	Depth	Soil Texture	Result	NJDEP SCC
S1	lead cadmium arsenic copper	0.25	ash & refractory	1,770 33.1 33.8 21,100	400 1 20 600
S2	lead cadmium arsenic	0.25	oily soil and car parts	19,900 12.6 28.6	400 1 20
S3	lead cadmium arsenic	0.25	ash & refractory	2,630 49.6 33.4	400 1 20
S4	lead cadmium arsenic	0.25	ash & refractory	1,270 37 59.2	400 1 20

June 1996 Surface Soil Sampling Results for PCBs - Junk Yard

Location	Parameter	Depth	Soil Texture	Result	NJDEP SCC
S2	Aroclors 1242 & 1254	0.25	ash	6.3	0.49

(Both Tables, See Attachment UU, Map 2)

August 7, 1996 Test Pit Samples - Landfill Area - METALS

Location	Parameter	Depth	Comments	Result	NJDEP SCC
S01A	lead	0.5	Battery Casings	5,760	400
S01C	lead arsenic	12	Battery Casings Into water table	47,900 40	400 20
S03A	lead	0.5	White & yellow material mixed with soil. More material at the surface.	43	400
S04A	lead	0.5	sand	44	400
S05C	lead	7	debris and soil	239	400

Data presented for S03, S04 and S05 represent the highest lead value from those locations and are included here for comparative purposes.  
(Attachments UU, CC and Map 2)

On the dates noted on the tables above, NJDEP conducted sampling at the site. All sampling locations can be viewed on Map 2. Since a resident population does not exist with regard to this site, determinations regarding Level 1 or Level 2 are not required.

**BACKGROUND** Soil background conditions at the site for all parameters were established at or just above the analytical detection limits by samples S6 and S7. For volatile organic compounds, acetone was detected above background at location S05C. For semivolatile compounds, S01 had background exceedances throughout the soil column. S03 did not exceed background for semivolatile compounds but did exhibit an elevated detection limits and numerous tentatively identified compounds. The yellow material noted in the shallow soil at S03 was is the same material which the 1991 analysis demonstrated to be a petroleum derivative. A similar elevated baseline with no detections of targeted compounds was observed in S04 and S05 although not apparently related to the yellow material. Zinc and arsenic were also noted above background levels at locations S01C and S05C. DDT and metabolites were detected in surface soils at all test pit locations.

**BACKGROUND CONTINUED** At the junkyard locations, samples for volatile organic compounds were not collected. Pesticides and PCBs were not detected at concentrations significantly above background except at the locations noted in the table above. For semivolatile organic compounds, no targeted compounds were detected at concentrations above background, but all sample locations were contaminated with petroleum compounds which were observable as either elevated detection limits or as tentatively identified compounds. Regarding metals, arsenic and lead were detected significantly above background at locations S2, S4, S6, S8, S10 and S12. The analytical results in their entirety can be reviewed at attachments UU and ZZ.

**TEST PIT LOCATIONS** Test pits were dug during 1991 and 1996 to characterize site soils. The results of the two sampling events were essentially the same, showing severe lead contamination in areas where vehicular battery casings were present. The 1996 sampling event documented no exceedances of SCCs for semivolatile contaminants, but indicated that non-targeted semivolatile contaminants are present at all locations. However, the 1991 sampling event documented percent level petroleum hydrocarbon contamination at test pit locations 1 and 3. These locations were associated with visual observations of petroleum sheen on groundwater (test pit 1) and oozing black liquid from a layer in the soil column (test pit 3).

**JUNK YARD LOCATIONS** Surface soils were collected in the scrap yard area at four locations during 1996. The samples were all collected within the first 3 inches of grade using hand trowels. Essentially, the results of the sampling demonstrated that the entire area of the scrap yard is contaminated with elevated levels of lead. The area of S1 was also contaminated with cadmium at levels an order of magnitude above the SCC. While petroleum contamination was evident area-wide at levels above background, the only SCC exceedance was at location S-2 where oily soils associated with vehicular engine hoses and clamps were observed.

**Total area of surficial contamination (square feet):**

The contamination is associated with wastes in the landfill and at the junkyard sections of the site. The junkyard section, which is approximately 250 feet by 800 feet or about 4.5 acres, is generally uniform in its contamination (see table above) except for the PCB contamination which is limited to the oily area of approximately 2,500 feet<sup>2</sup>. The landfill is not as uniform in its surficial contamination however, and it is reasonable to conclude, based upon the data collected in January 1991 (see above), that surficial contamination at the landfill is limited to areas where wastes are exposed, especially the broken battery casings. The casings cover an area along the banks of Hessian Run that is approximately 2,600 feet long and usually 100 feet wide, or about 6 acres. The remainder of the site appears to be covered with clean fill or is former farmland which does not appear to have been used for waste disposal by Matteo. The basis for concluding that the covered portions of the landfilled are not contaminated is that the January 1991 sampling included the cover material within 2 feet of grade in which contaminants were not found. Additionally, the former incinerator was approximately 1,000 feet from Matteo's property line with the trailer park. Based on the above sampling results and the distance involved, it is not suspected that the incinerator will have impacted soils proximate to the trailer park. Finally, samples collected at Matteo's border with the trailer park by NJDEP on August 7, 1996 revealed metals concentrations at levels typically associated with uncontaminated soils.

Based on all of the above, an observed release of petroleum hydrocarbons and lead to on-site soils has been clearly established.

If no soil sampling has been conducted, discuss areas of potentially contaminated soil, areas that are visibly contaminated or results from soil gas surveys.

Soil sampling has confirmed contamination.

Determine if any commercial agriculture, silviculture, livestock production or grazing are present on or within 200 feet of the site.

None of the noted activities are present.

Number of people occupying residences or attending school or day care on or within 200 feet of the site: 350 (Map 1, Attachment PP)

Number of workers on or within 200 feet of the site: 3

Number of on-site employees: 3

## PART V: GROUND WATER ROUTE

### A. HYDROGEOLOGY

Describe geologic formations and aquifer(s) of concern. Include interconnections, confining layers, discontinuities, composition, hydraulic conductivity and permeability.

The site lies within the Coastal Plain which can be described as a wedge of unconsolidated sediments which dip and thicken to the southeast. The sediments are deposited in distinct layers which serve as aquicludes or aquifers and range from Cretaceous to Holocene in age. According to a June 19, 1996 NJDEP memo regarding hydrogeology at the site, Matteo is located over outcrops of the Potomoc-Raritan-Magothy Formation (PRM), the Merchantville Formation and the Woodbury Clay, all of Cretaceous age. According to both the above noted memo and the State of New Jersey document Water Resources and Geology of Gloucester County, the Cape May Formation can be observed as surficial deposits at the site. Per the Geology of Gloucester County, the Cape May Formation, which serves as a minor aquifer in Gloucester County, overlays the Merchantville Formation which is a dark brown, sandy clay with occasional beds of glauconitic sand. The Merchantville generally serves as an aquiclude but is suspected to leak to the PRM system of aquifers below which is the most utilized aquifer in Gloucester County.

The PRM consist of three distinct aquifers (Lower, Middle and Upper), separated by confining units. It is the primary source of water for the communities in Burlington, Camden and Gloucester counties. In the vicinity of the Matteo site, major industrial and municipal users of the ground water from the PRM include the Borough of National Park (upper and lower PRM), Coastal Eagle Point Refinery (lower PRM) and Deptford Township (middle PRM). Recharge of the PRM occurs locally as a result of precipitation on outcrop areas, as well as infiltration from the Delaware River.

The upper aquifer of the PRM, which is about 100 feet thick in the vicinity of the Matteo site, corresponds to the sands of the Magothy Formation. The Magothy Formation consists of beds of dark-grey or black clay, alternating with white, micaceous fine sand. According to Navoy and Carleton (1995) the most reliable estimates of transmissivity for the upper PRM in the Camden area range from 2,000 to 10,000 ft<sup>2</sup>/day. An estimate of 240 ft/day for hydraulic conductivity was reported by these authors. Ground water flow conditions in the PRM may be influenced by the industrial and municipal wells although the wells in closest proximity to the site (National Park and West Deptford) are screened in the lower unit of the PRM. Data from the Coastal Refinery indicates ground water flow in the upper PRM is in an east to southeasterly direction (ReTec, 1995).

The combined Merchantville Formation and Woodbury Clay function as a confining unit overlying the upper aquifer of the PRM aquifer system and separating the upper PRM aquifer from the aquifer system in the overlying Englishtown Formation. Estimates of the vertical hydraulic conductivity for these two formations (combined) range from  $8.6 \times 10^{-7}$  to  $1.7 \times 10^{-3}$  centimeters/sec. While these two formations function as a regional confining unit, the actual thickness of the formations in the vicinity of the Matteo site and the extent to which waste disposal activities have taken place over the outcrop areas of the upper PRM must be evaluated in order to assess the potential for site related activities to impact the PRM aquifer system.

Based on soil borings at the site and a monitor well record for a well installed at an adjacent site (Crown Point Auto), the depth to ground water at the Matteo site is estimated to be 4 to 5 feet below grade. The Woodbury Creek and Hessian Run are tidally influenced in the vicinity of the site, therefore, ground water at the site may be tidally influenced. However, there is no site specific data available which would allow for an assessment of the ground water and surface water interactions.

Descriptions of the Merchantville, Woodbury, Cape May Formations and alluvium are as follows:

Merchantville Formation: In Gloucester County, this formation consists of green-black, glauconitic or micaceous silts and clays, or sandy clays. The Merchantville Formation is 45 to 70 feet thick and dips to the southeast at a rate of 43 feet/mile. According to Hardt and Hilton (1969), it is used as a minor aquifer in Gloucester County. Domestic wells are installed in a localized sand unit in the upper section, with wells yielding 15 to 90 gpm, but this formation functions chiefly as a confining layer.

Woodbury Formation: This formation is a massive, clayey silt (Zapeczka, 1984) and near the outcrop area is manifested as micaceous, silty clays or fine sands. It ranges in thickness from a few feet in the outcrop area to 80 feet elsewhere in Gloucester County, dipping to the southeast at a rate of 38 to 44 feet per mile. No wells are known to obtain water from this formation and it is thought to function primarily as a confining layer.

Cape May Formation: Medium to coarse sands and gravels, usually yellow or brown with minor clays. It can be as thick as 40 feet and is a minor aquifer with wells yielding 10 to 50 gallons per minute. Locally, where the Cape May Formation directly overlies the PRM, these two units may function together as an aquifer.

**Alluvium:** These deposits are predominantly fine silts or clays, but may contain organic material and gravel which are deposited in tidal flats and along low gradient streams. Adjacent to the Delaware River, alluvial deposits range from 10 to 40 feet in thickness and may retard the movement of brackish water from the Delaware River into water bearing sands of the PRM. (Attachment VV)

**Depth to aquifer of concern:** 7 feet (Attachment UU)

**Depth from lowest point of waste disposal/storage to highest seasonal level of the saturated zone of the aquifer of concern:**  
Waste contacts groundwater (Attachment UU)

**Permeability of the least permeable layer between the ground surface and the aquifer of concern:** Wastes are deposited directly into the groundwater.

**Thickness of aquifer:** 100 feet (Attachment VV)

**Direction of ground water flow:** North

**Karst (Y/N):** No

**Wellhead Protection Area (Y/N):** No **Distance:** NA

#### B. MONITORING WELL INFORMATION

Well No.	Screen Depth	Formation	Location
There are no monitor wells on-site. The well records (see attachment QQ) were for geophysical soil borings.			

**Identify the upgradient well(s):** NA

Briefly discuss why the monitoring wells were installed and describe contaminants identified in the monitoring wells. Include Well No., sampling date, sampling agency or company, contaminant levels and remediation standards. Discuss any other groundwater sampling that has occurred.

On June 5, 6 and 7, 1996, NJDEP conducted ground water sampling at the site utilizing a Geoprobe, a direct push-point sampling device. The following table provides analytical results for any parameter which exceeded United States Environmental Protection Agency (USEPA) ground water "benchmarks" or NJDEP Ground Water Quality Standards (GWQS). For lead all results not listed here are below the detection limit of 2.1 ppb (please note that ground water samples could not be collected at locations GW4 and GW5). The analytical results in their entirety are available for review in attachment UU. The sample locations can be viewed on the sample map (Map 2). All results are in parts per billion (ppb).

Location	Parameter	Depth (feet)	Result	USEPA Benchmark	NJDEP GWQS
GW3	lead	14	20.1	15	10
	cadmium		20.8	5	4
	copper		1,680	NA	1,000
GW7	lead	13	19.4	15	10
GW8	lead	6	10.9	15	10
GW10	lead	14	3.1	15	10

**BACKGROUND:** Groundwater background conditions at the site are established at locations GW11, GW12, GW13 and GW14 which exhibited a non-detectable or near non-detectable concentration for all parameters. Exceedances to the background conditions were observed at GW3, which had an exceedance for zinc; at GW8, which had an exceedance of background for lead; at GW9, which exhibited elevated tentatively identified semivolatile compounds (It was at GW9 that NJDEP staff observed a petroleum sheen on the groundwater); and at GW10, which had an exceedance of background for lead.

#### C. POTABLE WELL INFORMATION

Distance to nearest potable well: On-site  
Depth of nearest potable well: Unknown

Identify all public supply wells within 4 miles of the site:

See next page

Water Company	Distance from Site (miles)	Depth (feet)	Formation
West Deptford Water Dept.	0.5	366	GKMR
West Deptford Water Dept.	1.2	363	GKMR
West Deptford Water Dept.	2.5	243	GKMR
West Deptford Water Dept.	2.6	440	GKMR
West Deptford Water Dept.	3.2	315	GKMR
West Deptford Water Dept.	3.5	288	GKMR
National Park Borough	0.9	275	GKMR
National Park Borough	0.9	282	GKMR
Woodbury City Water Dept.	1.5	188	GKMR
Woodbury City Water Dept.	1.8	305	GKMR
Woodbury City Water Dept.	1.9	457	GKMR
Westville Borough	2.5	274	GKMR
Westville Borough	2.6	313	GKMR
Westville Borough	2.6	317	GKMR
Brooklawn Borough Water	2.8	293	GKMR
Brooklawn Borough Water	2.9	320	GKMR
Brooklawn Borough Water	2.9	327	GKMR
Bellmawr Borough	3.3	386	GKR
Bellmawr Borough	3.3	164	GKM
Bellmawr Borough	3.4	359	GKR
Woodbury Heights Borough	3.0	235	GKMR
Deptford Township MUA	2.8	363	GKMR
Deptford Township MUA	3.2	273	GKMR
Deptford Township MUA	3.7	261	GKMR
Deptford Township MUA	3.7	355	GKMR
Deptford Township MUA	3.7	489	GKMR

The abbreviations in the table above have the following meanings: GKMR stands for the Raritan/Magothy Formation; GKR stands for Raritan Formation and GKM stands for Magothy Formation.

Discuss private potable well use within 4 miles of the site. Include depth, formation and distance, if available.

All public records and officials surveyed for this report indicated that private potable well use for the vicinity is very unusual. The only potable wells confirmed by this office were the two on-site wells which were sampled (see below) and another well (not found) that is reportedly 1,000 feet to the north and across Hessian Run. (Attachment SS)

Discuss the site's source of potable water. The site maintains a potable well which is discussed above. The depth of the well is not known.

Discuss information regarding the population utilizing wells that are known to be contaminated. Also include any other evidence of contaminated drinking water or wells closed due to contamination. State whether Level 1 or Level 2 contamination is present.

On August 31, 1994, private potable wells at the site were sampled. The analytical results revealed lead in the Matteo residential well at 57 parts per billion (ppb). This contamination is attributable to the site and represents a Level 1 condition. (Attachment MM)

Tabulate for each aquifer the population utilizing that aquifer for drinking purposes within 4 miles of the site. Include only those populations which utilize wells that have a potential to be impacted, not wells which are actually impacted.

Distance from site (miles)	Population/Aquifer		
	Upper PRM	Middle PRM	Lower PRM
0 - 1/4	0	0	0
1/4 - 1/2	0	0	3040
1/2 - 1	0	3,550	0
1 - 2	0	16,449	0
2 - 3	7,448	11,888	0
3 - 4	0	20,365	2,666

(Attachment SS)

Identify industrial/irrigation wells within the vicinity of the site. Include depth, formation, distance and direction, if available.

There are numerous industrial/irrigation wells within the vicinity of the site. They are listed in tabular form on Map 5.

#### D. POTENTIAL

Discuss the potential for ground water contamination, including any other information concerning the ground water contamination route.

Ground water contamination has been confirmed and is attributable to the site.

#### PART VI: SURFACE WATER ROUTE

##### A. SURFACE WATER

Does a migration pathway to surface water exist? (Y/N): Yes  
Flood plain: Floods daily                      Slope: 3 per cent

Does contaminated ground water discharge to surface water? (Y/N):  
The site is located on an outcrop of the Raritan/Magothy aquifer system. It is possible that groundwater recharges the aquifer at this location rather than discharging to the surface water.

Identify known or potentially contaminated surface water bodies. Follow the pathway of the surface water and indicate all adjoining bodies of water along a route of 15 stream miles.

Surface Water Body	Distance from Site (miles)	Flow (cfs)	Usage(s)
Hessian Run	0.0	10	Fishing, Recreation
Woodbury Creek	0.1	60	Fishing, Recreation
Delaware River	1.2	2000	Fishing, Shipping

While on site during the June 1996 sampling event, NJDEP personnel were approached by a man seeking access to the banks of Hessian Run for the purpose of fishing. Additionally, the Atlantic Coast Ecological Inventory documents this area as part of the Delaware River Estuary, which contains game fish such as the American Shad and the Striped Bass. (Attachments UU, AAA)

Identify drinking water intakes and fisheries within 15 miles downstream (or upstream in tidal areas) of the site. For each intake or fishery identify the distance from the point of surface water entry, the name of the fishery and/or supplier and population served.

There are no downstream intakes within the specified distance on the NJDEP Surface Water Intakes list. (Attachment YY)

Discuss surface water or sediment sampling conducted in relation to the site. Discuss visual observations if analytical data are not available (include date of observation). Include surface water body, sampling date, sampling agency or company, contaminant. State whether Level 1 or Level 2 contamination is present for surface water. State whether Level 2 contamination of sediments is present.

The site is located on the banks of Hessian Run and Woodbury Creek, which are tidal at this location. The landfilling of battery casings at the site has left the southern bank of Hessian Run strewn with the casings along the entire length of the site. In some areas along Hessian Run, battery casings form an extremely porous, 5 to 10 foot deep layer that acts as a reservoir of stream water which infiltrates the layer during the incoming tide.

On August 7, 1996, NJDEP conducted sediment and surface water sampling in Hessian Run and Woodbury Creek. The sampling was started approximately one hour after the onset of the outgoing tide and completed prior to slack low tide. At the site, tidal action exposes wide mud flats over which stored water from the landfilled battery casings flows during the outgoing tide. Two of these flows were sampled and are designated as SW3 and SW5. The remaining surface water samples were taken directly from Hessian Run or Woodbury Creek. All sampling points can be viewed on Map 2.

The table on the following page contains analytical results from the August 7, 1996 sampling event. All sediment data is expressed in parts per million (ppm) and all surface water data is expressed in parts per billion (ppb). The abbreviation SWQS stands for Surface Water Quality Standard which are rules adopted by NJDEP for all surface waters. The SWQS for lead used in this table is 2.5 ppb, which represents the chronic freshwater aquatic toxicity standard. The complete analytical results can be viewed in attachment ZZ.

August 7, 1996 Sediment/Surface Water Sampling

Location	Contaminant	Sediment	Surface Water	SWQS
SED1/SW1	lead	421	6.8	2.5
SED2/SW2	lead	16	3.7	2.5
SED3	lead	3,220		NA
SED4/SW3	lead Aroclor (total)	8,500 78	22.9	2.5
SW4	lead		17.1	2.5
SED5	lead	1,030		NA
SW5	lead		244	2.5
SED6	lead	250		NA
SED7/SW6	lead	9	8.9	2.5
SED8	lead	333		NA
SED9/SW7	lead	14	5.6	2.5
SED10	lead	6,550		NA
SED11	lead	55		NA
SED12	lead	244		NA
SED13	lead	180		NA
SED14/SW8	lead	113	5.9	2.5

**BACKGROUND** Surface water background conditions for volatile and semivolatile organic compounds, for pesticides and for PCBs were established at or just above the analytical detection limits by samples SW1 and SW8. Surface water background conditions for metals were also established by samples SW1 and SW8, however, background for zinc was approximately 14 ppb, while background for lead was approximately 6 - 7 ppb. Due to the documented fishery at the site and the observed release documented above, a Level 1 condition exists and is attributable to the site.

Sediment background conditions for volatile organic compounds was established at the analytical detection limits by all samples. Sediment background conditions for semivolatile organic compounds, pesticides and PCBs were established at or just above the analytical detection limits by samples SED11, SED7 and SED14. Sediment background conditions for metals were established by samples SED11, SED7 and SED14. Background for lead ranges from approximately 10 ppm to 100 ppm. Due to the documented fishery at this location, the contamination noted in the sediments represents a Level 1 condition.

Determine if a contaminant on site displays bioaccumulative properties. Identify all bioaccumulative substances that may impact the food chain.

PCBs are a bioaccumulative compound which were discovered in site sediment (SED4) at 78 ppm.

Determine if surface water is used for irrigation of commercial food or commercial forage crops, watering of commercial livestock or commercial food preparation.

There are a number of irrigation surface water withdrawal permits issued. They are listed in tabular form in Map 5.

Discuss the potential for surface water contamination, include any additional information concerning the surface water route.

Contamination has been confirmed and is attributable to the site.

#### B. SENSITIVE ENVIRONMENTS

Identify all sensitive environments, including wetlands, along the 15 stream-mile pathway from the site:

The table below has the following abbreviations which are defined as follows: PSS1, Palustrine Scrub-Shrub; PEM, Palustrine Emergent; P(SS/EM)1, Palustrine Scrub-Shrub Emergent Deciduous; PEMR, Palustrine Emergent Tidal; R1EM: Riverine Emergent; (Map 6)

Environment Type	Surface Water Body	Flow (cfs)	Distance from Site	Wetland Frontage
R1EM	Hessian Run	10	0.0 miles	0.57 miles
P(SS/EM)1	Hessian Run	10	0.0 miles	0.28 miles
PEMR	Woodbury Creek	60	0.2 miles	1.0 miles
R1EM	Woodbury Creek	60	0.9 miles	0.2 miles
PSS1	Woodbury Creek	60	1.0 miles	0.2 miles

**PART VII: AIR ROUTE**

Discuss observed or potential air release.

There is no potential for an air release. This conclusion is supported by samples of surficial soils (S5, S6, S7, S8) which confirm that contaminants found in the operational areas have not migrated to nearby residential areas. (Attachment ZZ)

Identify populations residing within 4 miles of the site.

Distance (miles)	Population
0 - 1/4	350 (SEE PHONE INTERVIEW)
1/4 - 1/2	500 (EST. FROM HOUSE COUNT)
1/2 - 1	9,252
1 - 2	15,036
2 - 3	23,308
3 - 4	41,138

An estimate of 250 homes within 0.25 to 0.5 miles from the site was made based upon a review of Map 1. Assuming at least 2 people in each home, there would be approximately 500 people in the noted distance interval. (Attachment XX, Map 1)

Identify sensitive environments and wetland acreage within 4 miles of the site.

Distance	Type of environment	Wetland acreage
Not evaluated since an air pathway threat does not exist.		

Identify all land resources (commercial agriculture, silviculture or recreation) within 4 miles of the site.

Not evaluated since there is no air pathway threat

**PART VIII: REMOVAL ACTION AND/OR IEC CONDITION**

Discuss conditions which constitute an Immediate Environmental Concern (IEC) or warrant EPA Removal Action consideration (improper storage of incompatible/reactive materials, leaking or unsound containers, inadequate site security, subsurface gas threat).

Relative to the adjacent trailer park, the high levels of lead in surface soils are well beyond the 200 foot criterion established by USEPA for a direct contact threat. However, based on the Matteo residence being within 200 feet of per cent levels of lead in surface soils, and based upon the ease of access for children who would access the site from the adjacent trailer park, the site represents a direct contact IEC. The on-site potable well contamination also meets the criteria for a potable well IEC. Since surface water is not used for potable purposes, the documented lead contamination of surface waters does not represent a drinking water IEC.

The site should also be evaluated as a possible EPA removal action candidate.

#### **PART IX: ENFORCEMENT ACTIONS**

1. **Type of enforcement activity:** Administrative Order  
**Issuing agent:** NJDEP  
**Date:** April 30, 1974  
**Description of violation:** Alteration of the use of an approved incinerator from wire reclamation to battery reclamation.  
**Follow-up activity:** Matteo ceased melting batteries in the incinerator and began crushing the batteries to reclaim lead.
2. **Type of enforcement activity:** Administrative Order & Penalty  
**Issuing agent:** NJDEP  
**Date:** January 5, 1984  
**Description of violation:** Disposal of solid waste without approval.  
**Follow-up activity:** A \$150 penalty was paid by Matteo and classified wastes dumped at the site.
3. **Type of enforcement activity:** Spill Act Directive  
**Issuing agent:** NJDEP  
**Date:** June 14, 1995  
**Description of violation:** Discharges of Hazardous Substances  
**Follow-up activity:** Matteo has not complied with the Directive. NJDEP is proceeding with public funds to complete sampling at the site.

#### **PART X: CONCLUSIONS AND RECOMMENDATIONS**

List each area of concern and state whether further remediation is required.

**JUNKYARD:** Surface soils are impacted with concentrations of lead and cadmium which are orders of magnitude higher than background conditions. Ground water sample GW3 confirmed that lead and cadmium have impacted ground water at this location at a depth of 14 feet. While the depth of the potable well at the site is not

known, lead contamination was documented at the well, which is less than 200 feet laterally from GW3. Typically, private potable wells are relatively shallow, and it is therefore reasonable to conclude that the private well at the site withdraws water from the upper portion of the PRM which outcrops at the site. It is recommended that this area undergo a remedial investigation to determine the vertical and horizontal extent of soil and groundwater contamination. The Matteo residence and well directly adjacent to the junkyard area at the site makes the documented soil and ground water contamination a Level 1 condition.

**LANDFILL:** Test pit soil sample S01 exhibited lead contamination an order of magnitude above the NJDEP SCC for residential areas. This sample was associated with the battery casings. The August 28, 1984, NJDEP sample of soils was also associated with the battery casings and demonstrated that the soil failed the hazardous waste test for lead. The deep soil samples also revealed very high lead concentrations and were likewise associated with the battery casings. Finally, all sediment samples which were associated with battery casings revealed high lead concentrations. Therefore, it is reasonable to conclude that the entire length of the landfilled area which is associated with the battery casings has high concentrations of lead. In some areas the casings are exposed at grade and in other areas they are buried. The casings are also associated with lead contamination in ground water, especially at GW7, which is adjacent to the area where water discharging to Hessian Run at low tide revealed high concentrations of lead.

Regarding petroleum wastes at the landfill, test pit samples from 1991 revealed that isolated areas of wastes at the landfill exhibit petroleum contamination at per cent levels. Ground water sample GW9 collected on June 5, 1996 near one of these buried petroleum waste areas revealed contamination with tentatively identified semivolatile organic compounds. Based on all of the above, it is recommended that the landfill undergo a remedial investigation of ground water. Further sampling of wastes, especially the battery casing wastes, is not recommended, since they have been generally shown to exhibit gross levels of contamination and should undergo proper landfill closure. The documented soil contamination represents a Level 2 condition, since a resident population does not exist within 200 feet. The documented ground water contamination could be considered a continuation of the contamination documented in the junkyard area and, therefore, represents a Level 1 condition.

**SEDIMENTS & SURFACE WATER:** Upstream sediment samples revealed low concentrations of semivolatile organic compounds and lead which are attributable to run-off from the nearby roads and highways. An observed release of lead is nevertheless apparent from sediment samples adjacent to the site which reveal concentrations of lead orders of magnitude higher than background. This is especially evident at location SED4, which also revealed very high levels of

PCBs. SED4 is located near to GW7, which revealed high levels of lead in groundwater.

The downgradient sediment sample SED7 did not reveal lead contamination. Aerial photos revealed that sediments from the site may preferentially be transported in a channel which does not pass by location SED7 and is only accessible via boat. It is recommended that a remedial investigation be conducted in sediments leading away from the site. Surface water samples likewise revealed an observed release from those samples collected adjacent to the site, all of which had lead concentrations which were three times higher than background. One sample, SW5, was 35 times higher than background.

Due to the documented presence of a fishery, the contaminated sediments and surface waters represents a Level 1 condition.

The on-site residential property (owned by Matteo) and ease of access for neighboring trailer park residents make this site an IEC for direct contact with lead contaminated materials. The on-site potable well contamination also warrants immediate action and meets the criteria for a potable well IEC.

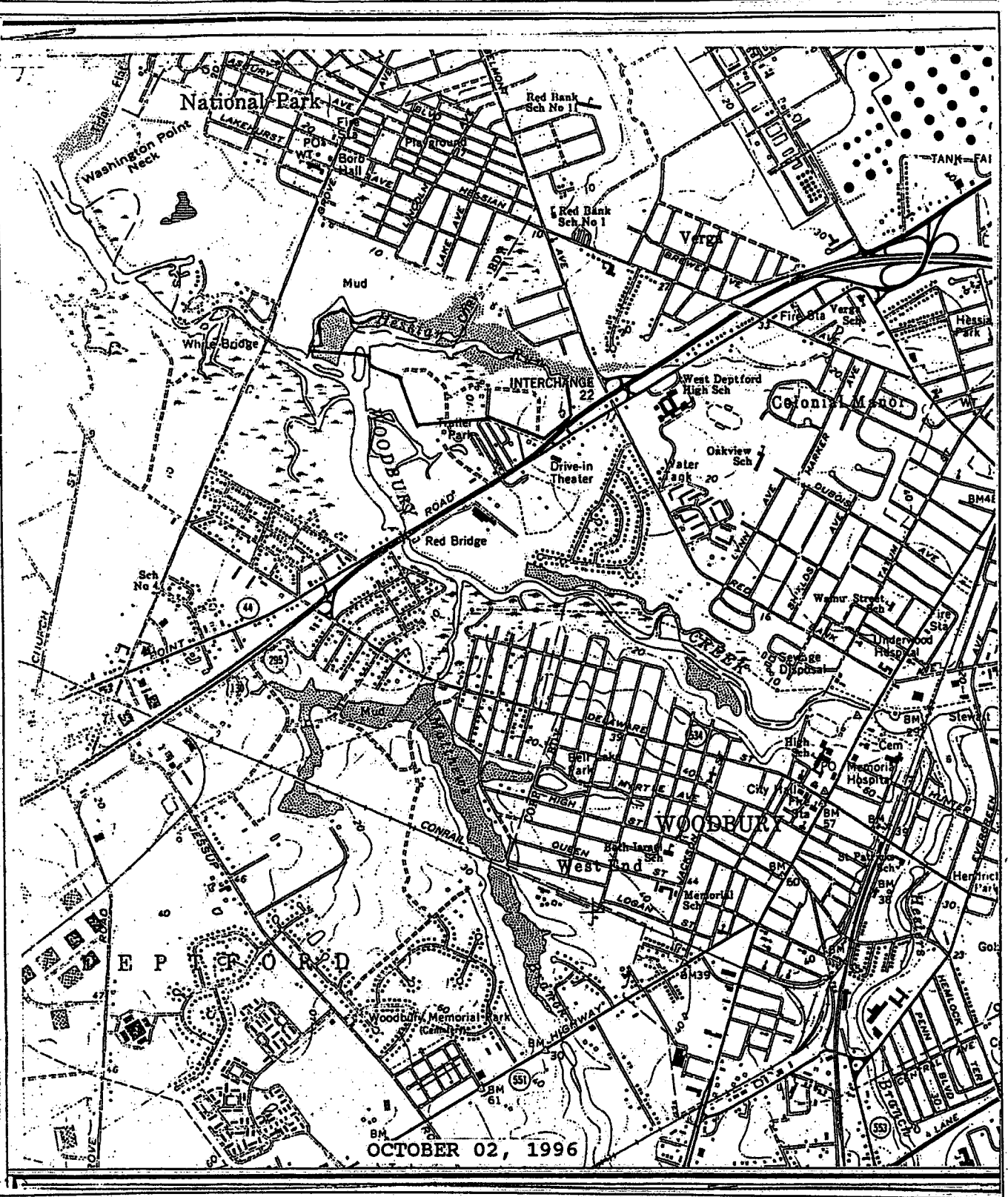
This site is assigned a higher priority for further action under CERCLA and should be evaluated as a possible EPA removal action candidate.

Submitted by: Nick Sodano      Title: HSMS II  
NJDEP, Division of Publicly Funded Site Remediation,  
Bureau of Environmental Measurements and Quality Assurance  
Environmental Measurements and Site Assessment Section  
Date: December 31, 1996

**PART XI: POTENTIALLY RESPONSIBLE PARTIES**

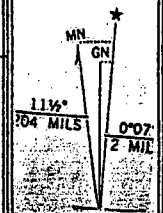
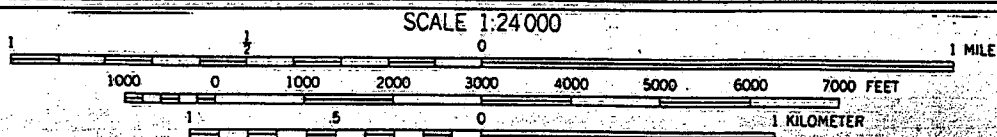
NAME	OWNER/OPERATOR/ KNOWN DISCHARGER	CURRENT ADDRESS
James Matteo & Sons	Owner/Operator Known Discharger	1708 US Route 130 West Deptford, NJ 08086

MAPS



JAMES MATTEO AND SONS, INC 1708 Route 130, West Deptford NJ 08086  
 Gloucester County Latitude: 39° 51' 20" Longitude: 75° 10' 15" (1986)

MAP 1 - USGS TOPOGRAPHIC MAP - WOODBURY QUADRANGLE



# HESSIAN RUN

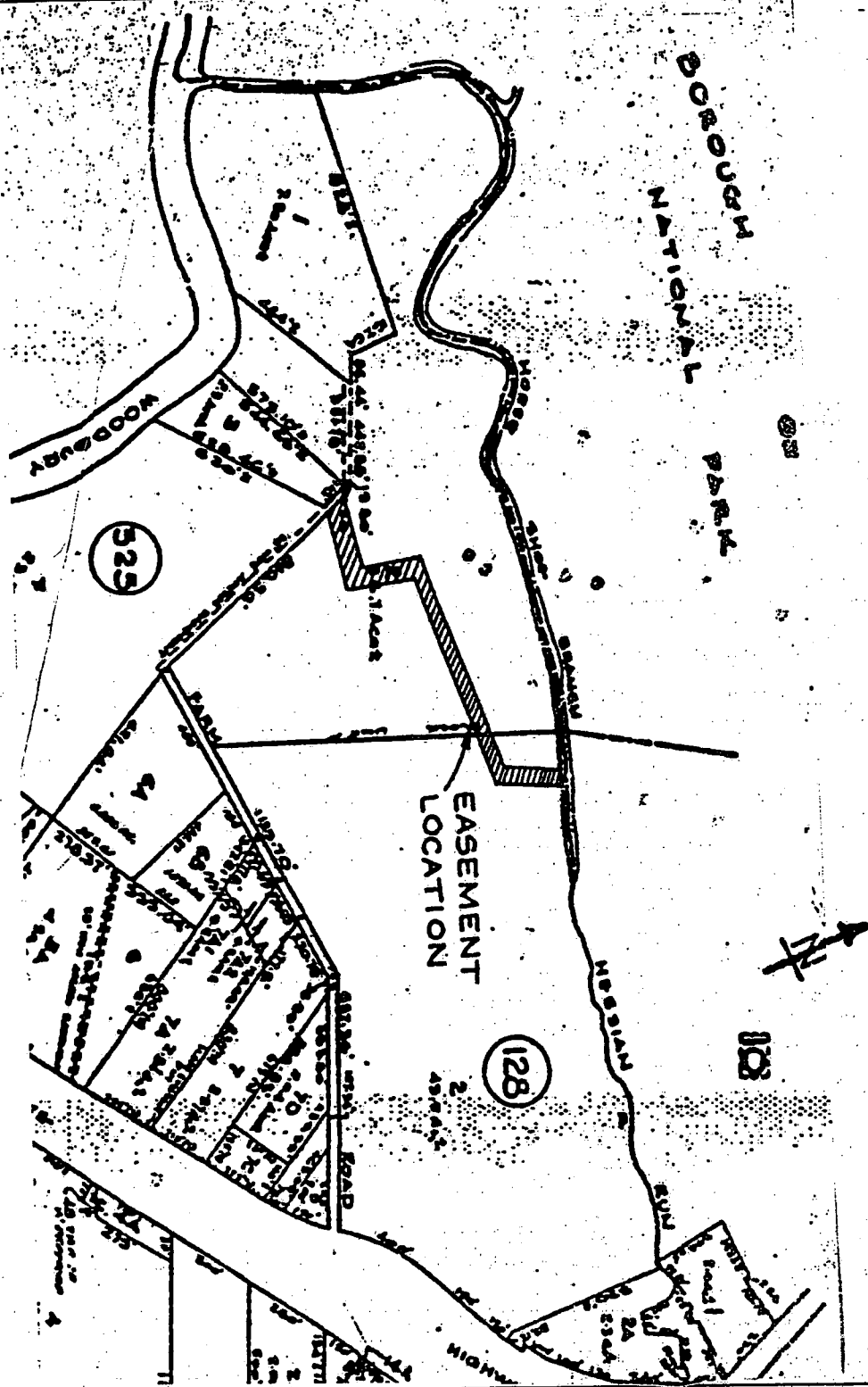
Map 2  
Matteo Site Map  
and  
Sample Locator  
Map



0.2 0 0.2 0.4 0.6 Miles

■ Sample Locations □ Site Boundry  Surface Water  Roads

GIS MAP-1996  
By NJDEP

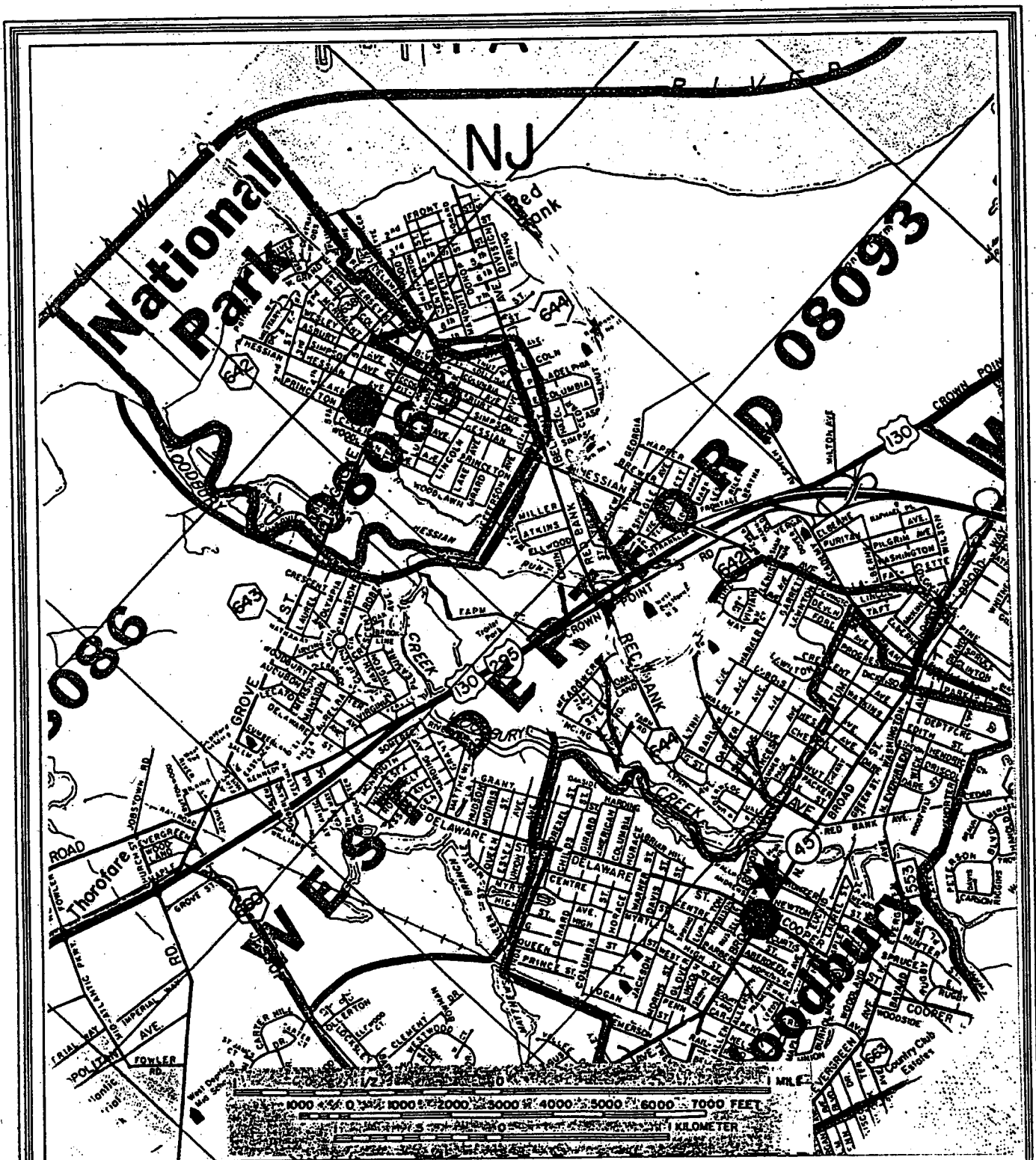


JAMES MATTEO AND SONS SITE, WEST DEPTFORD TOWNSHIP

MAP CREATED OCTOBER 02, 1996

MAP SOURCE: WEST DEPTFORD TOWNSHIP, GLOUCESTER COUNTY

MAP 3 - TAX MAP



# **JAMES MATTEO AND SONS SITE, WEST DEPTFORD TOWNSHIP**

MAP CREATED OCTOBER 02, 1996  
 MAP SOURCE: ALFRED PATTON MAP OF GLOUCESTER COUNTY  
 MAP 4 - ROAD MAP



**100,000 GPD WATER  
WITHDRAWAL POINTS ONLY  
AND CONTAMINATED SITES  
WITHIN  
5.0 MILES OF:**

LATITUDE 395120  
LONGITUDE 751015

DRAFT

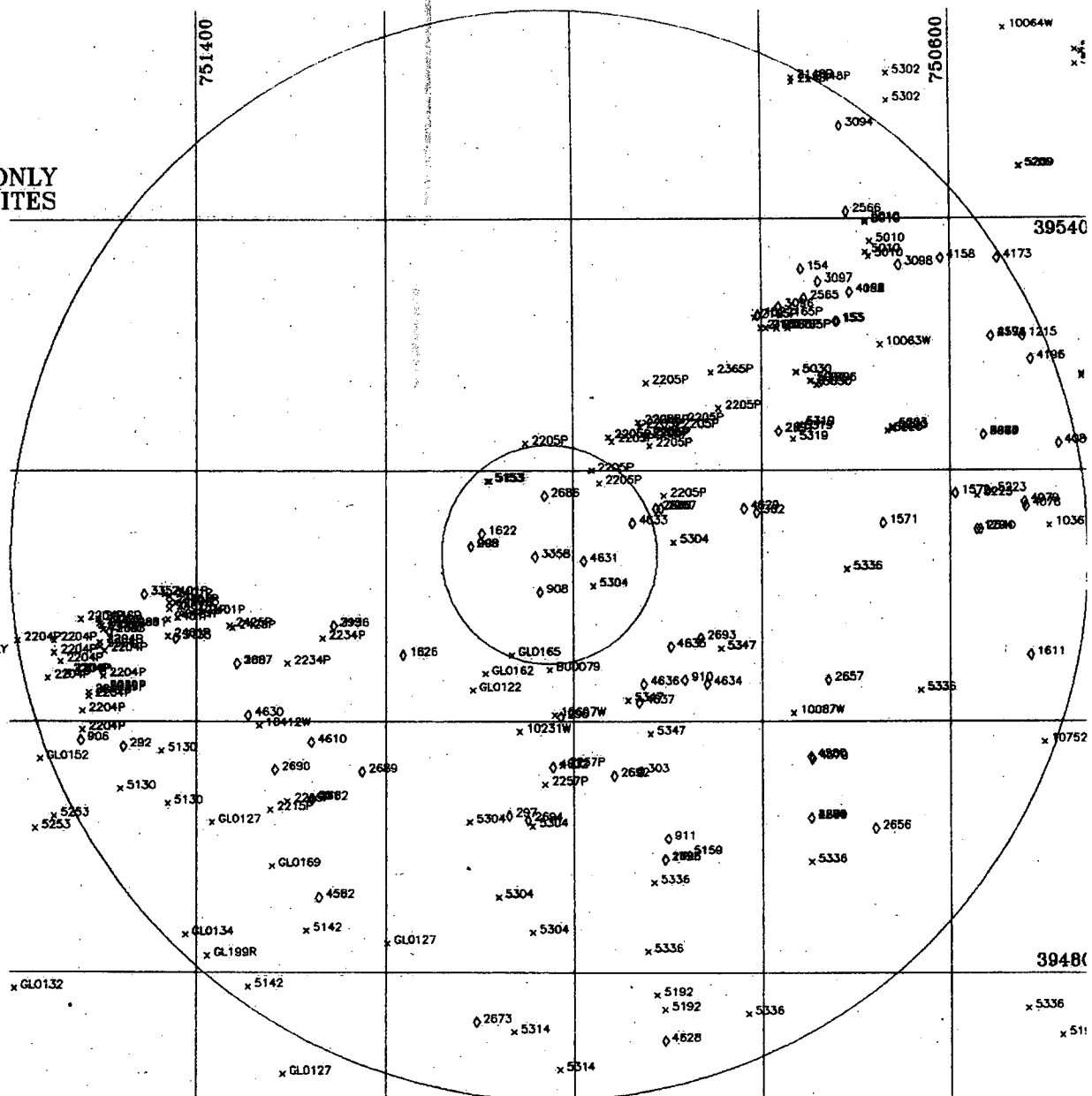
SCALE: 1:63,360  
(1 Inch = 1 Mile)

\* 100,000 GPD WATER WITHDRAWAL POINTS ONLY  
 ♦ CONTAMINATED SITES  
 1 MILE AND 5 MILE RADII INDICATED

CONTAMINATED SITE LIST  
AS OF 03/21/95

PLOT PRODUCED BY:  
NJDEP  
WATER SUPPLY ELEMENT  
BUREAU OF WATER ALLOCATION  
CN-426  
TRENTON, NJ 08625  
DATE: 05/23/86

SUBJECT TO REVISION

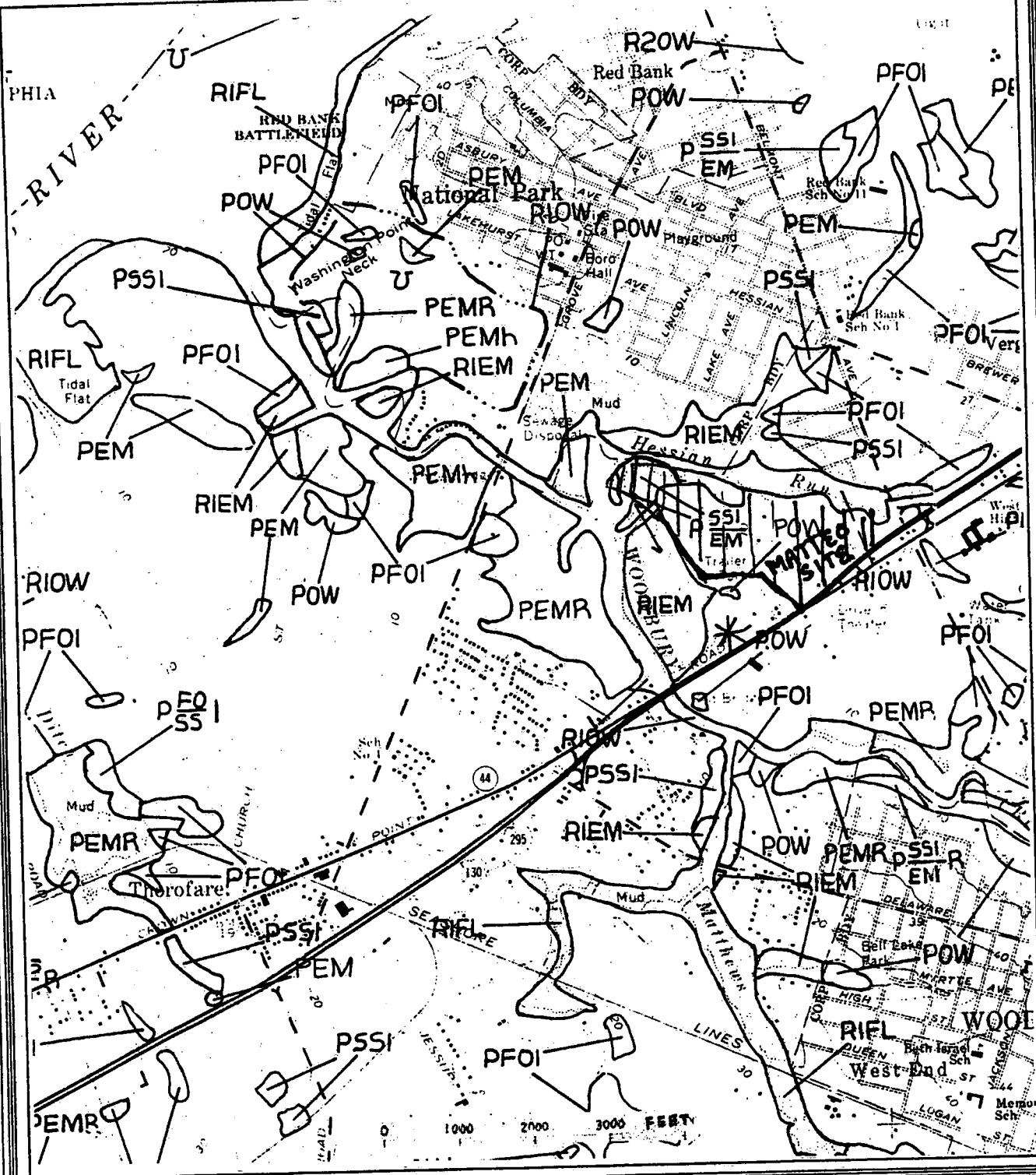


**Map 6  
Wetlands Map**



0.5 0 0.5 1 Miles

- Site Boundary
- Surface Water
- Wetland Types**
- DECIDUOUS SCRUB/SHRUB WETLANDS
- DECIDUOUS WOODED WETLANDS
- FRESHWATER TIDAL MARSHES
- HERBACEOUS WETLANDS



**JAMES MATTEO AND SONS SITE, WEST DEPTFORD TOWNSHIP**

CREATED OCTOBER 02, 1996

SOURCE: US DEPT. INTERIOR WETLANDS MAP, WOODBURY QUADRANGLE

**MAP 6 - WETLANDS**



# FIRM

## FLOOD INSURANCE RATE MAP

TOWNSHIP OF  
WEST DEPTFORD,  
NEW JERSEY  
GLOUCESTER COUNTY

**PANEL 3 OF 8**  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
340214 0003 B

**EFFECTIVE DATE:**  
**JUNE 1, 1982.**



**Federal Emergency Management Agency**

**FIRM  
FLOOD INSURANCE RATE MAP**

TOWNSHIP OF  
WEST DEPTFORD,  
NEW JERSEY  
GLOUCESTER COUNTY

**PANEL 5 OF 8**  
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER  
340214 0005 B

EFFECTIVE DATE:  
JUNE 1, 1982



**Federal Emergency Management Agency**

